

Butterflies in the Island of Rhodes, May 1971

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My wife and I began our fifth visit to Greek territory with six days on the island of Rhodes, from 16th to early on 22nd May. For the first three days we were accompanied by Mr John Coutsis and his mother, who joined us from Athens. We wished to see some of the endemic sub-species of Rhopalocera which had been described from Rhodes, and perhaps to add to the rather short list of species known to occur there. We had only limited success, probably because we were between seasons; owing to a forward spring followed by a prolonged check in April, the early butterflies had quite disappeared, while most of the later species which we had hoped to see were not yet out, although the weather during our stay was fine and warm except for cloud and showers on the mountains on the second day. Nevertheless, as little has been published in English on the subject, a record of our experience may be of interest.

The islands of Rhodes is 48 miles long by 22 miles broad, with an area of 540 sq. miles. In shape, and in its north east to south west orientation, it is rather like the Isle of Man; but it is about half as big again. At its northern tip only seven miles of sea separate it from the Turkish mainland of Asia. A mountain chain which reaches 1,215 m. at its highest point runs down the western side and is quite well wooded; the more level ground on the eastern side is hotter and drier, but irrigation nourishes large groves of orange, lemon and other fruit trees. In May the vegetation, except very near the coast, showed little sign of dessication and there was an abundance of wild flowers, though unfortunately singularly few butterflies. Nearly half the resident population, and almost all the innumerable visitors, are concentrated in Rhodes city on the extreme northern tip; the rest of the beautiful island has nothing bigger than villages. linked by roads which are good round the coast but indifferent or impassable where they cross the mountain spine.

Several descriptions and lists of the lepidoptera of Rhodes have been published, notably by Rebel (1916, 1924, 1936), Turati and Fiori (1929, 1930), and Hartig (1940); and in 1963 Bender incorporated these with the results on his own visits in 1939 and 1958, listing 45 species of Rhopalocera and 104 of other macro-lepidoptera. Eight of these are sub-species which are supposed to be endemic, either in Rhodes alone, or in the Dodecanese. But there seems to have been no collecting by residents, and it is unlikely that Bender's list is complete even for the Rhopalocera. There have also been pictures and discussions in various journals of the extraordinary swarming of the Tiger moth, *Callimorpha quadripunctaria* Poda, in the "Valley of the Butterflies" (Petaloudes), which has become one of the regular tourist attractions. This swarming we did not see, being at least a month too early.

On our first day, 16th May, we made a late start because of the need to sleep off our night flight from London and to pick up our hired car. But about 11 a.m. we started with Mr and Mrs Coutsis along the west coast and then turned inland to spend the middle of the day on the mountain Profitis Ilias (798 m.), which is largely covered by a forest of Aleppo Pine (*Pinus halepensis* Miller). Just below the forest we found a bank where *Maniola telmessia ornata* Turati & Fiori and *Aporia crataegi fert* Turati were common and in good condition, with two or three *Iphiclides podalirius* L. But the forest and bare places on the ridge of the mountain yielded very little except a couple of *Nymphalis polychloros* L., which we failed to catch, a few *Lycaena phloea* L. and some of the Geometrid moth *Rhodometra calabra* Petagna. When in the afternoon we turned down to the coast and visited the ancient Greek site at Kamiros the same absence of butterflies was apparent, except for the ubiquitous *M. telmessia*.

On the second day we started again along the west coast road, but crossed by a high pass to the village of Aghia Isidoros, which nestles under the bare eastern slopes of Mt. Ataviros (1,215 m.), where the Blue *Plebejus loewii robusta* Turati has been recorded in early June. But cloud on the mountain prevented proper exploration of this locality, which anyhow did not seem promising; so we descended some way on the road to Lindos to a flowery meadow where we were able to eat our sandwiches in a sunny interval but could still find very few butterflies. Continuing towards Lindos, we caught a fine *Nymphalis polychloros* but were again beset by cloud and showers as we drove through a fine forest of *Arbutus unedo*, which might have given us a sight of *Charaxes jasius* L. if conditions had been better. After spending a couple of hours viewing the charming white-washed villages of Lindos and the combined classical temple and mediaeval castle on the rock above it, we drove back to Rhodes in the late afternoon, catching on the way a single *Hipparchia syriaca ghigii* Turati. The method of its capture was curious. Mrs Coutsis saw a large Satyrid fly into a fir tree below the road, presumably to settle down for the night. After some random stone-throwing had failed to dislodge it, it was spotted at rest on the trunk about twenty feet away and quite out of reach. John Coutsis threw another stone. This hit it fair and square and brought it to the ground. This was a fairly heavy day, with much sight-seeing though little successful collecting.

On the third day we drove first to the hill of Filerimos (400 m.), about 15 kms. out of Rhodes, where there are the remains of another classical temple and a Byzantine church now used as a monastery. The lower slopes yielded no butterflies of interest, but on the rough ground in front of the monastery we saw more species and greater numbers than anywhere else in Rhodes. They included several *Kirinia roxelana* Cramer and *Lampides boeticus* L. and a single *Vanessa atalanta* L., though only *M. telmessia*, *Thymelicus actaeon* Rott., and *Colias*

croceus Fourc. were common. Later we went on hopefully to the "Valley of the Butterflies"; a well-watered glen in a fine deciduous forest. But we found literally *no* lepidoptera there except a few *M. telmessia*, so we could only console ourselves by eating the special dish of macaroni offered by the little restaurant. A case on its wall contained a score of faded *Callimorpha quadripunctaria* and a battered *Charaxes jasius*. Beside a stream lower down we caught a very large *Euchloe ausonia* Hübn. and singles of *K. roxelana* and *L. boeticus*, and a water-course by the sea on the coast road gave us a couple of worn female *Thersamonia thersamon* Esp., a *Carcharodus alceae* Esp., and more *T. actaeon*, as well as a view of a number of interesting birds, including Hoopoe (*Upupa epops*), Glossy Ibis (*Plegadis falcinellus*) and some waders which we could not identify with certainty. Mr and Mrs Coutsis unfortunately had to fly back to Athens that evening.

After a day given to sight-seeing in Rhodes city, on 20th May my wife and I paid another visit to the east coast. After exploring the attractive little spa at Kalithea, beside the sea 10 kms out of Rhodes, we turned to the main road to Lindos and then diverged to the Epta Pighes (Seven Springs), where there is a small lake in a wooded valley rather like that of the Petaloudes. Later, with several stops on the way, we spent an hour in a promising looking river bed some miles short of Lindos, before returning to Rhodes in the early afternoon. But in all these places there was a dearth of lepidoptera. The only interesting things seen were a few fresh and very active *Gonepteryx*; but all those which I could get near enough to identify were *G. farinosa* Zell. and not the endemic race of *G. cleopatra* L. which I was looking for. A disappointing day, despite good weather and good looking country.

On our last day we made another tour on the west coast and in mountains, driving first to Embona, high on the north western side of Mt. Ataviros, below which there is a fine fir forest, and then descending to the coast via Kritinia for lunch and a refreshing bath at Kamiros. We saw nothing new in the mountains except some fresh *Polyommatus icarus* Rott., but near Kamiros an uncut corner of a crop of vetch had attracted an abundance of *T. actaeon* of both sexes, and also yielded *S. orbifer* and a fine female *Lampides boeticus* L. We left Rhodes by an early plane to Athens on 22nd May.

Rhodes is a beautiful island, and its history and archaeology are fascinating; but at this season at least its butterflies were disappointing. We had expected a limited island fauna, but not the general scarcity of every species except *M. telmessia* and, in a very few places, *A. crataegi*, *T. actaeon* and *C. croceus*. This was in striking contrast to my experience in Cyprus at the same time in 1954 and in Crete in early June 1969: in both, though the number of species was also small, most of them were widespread and abundant. To judge from the negligible attendance at lights round Rhodes City, Heterocera were equally scarce. Probably our timing was wrong. We

did see altogether just half of the 46 species of *Rhopalocera* listed by Bender, but added none. Some, however, deserve comment.

Maniola telmessia ornata Turati entirely replaces *M. jurtina* in Rhodes, but is a very different-looking species. Bender gives an excellent black and white photograph of nine examples. The males are little bigger than those of *Pyronia tithonus* L., and, with large orange patches on their forewings, look rather like them. The females, however, are as big as those of British *M. jurtina*. With their pale mauve undersides they resemble *M. cypricola* Graves, which is peculiar to Cyprus; but in that the males are much larger and have little or no orange on the upperside. The well-developed spots are another feature of *ornata*. In my series of 19 males and 9 females, on the upper side of the forewings the apical spot is more or less extended, and in five males and seven females it has *two* white pupils. On the underside of the forewings this feature is even more marked in both sexes, but on the hindwings the males alone are heavily spotted: all of mine have two large black rings with white centres, and all but four have up to three more small ones, mostly with white points in them. In the females the spots are few and hardly discernible. The spots on the undersides of the male hindwings are very prominent when the insects are at rest. It has been suggested that they are repellent to lizards and other predators, or, alternatively, that they are repellent to lizards and other predators, or, alternatively, that they attract attention to parts of the butterfly's anatomy where a bite will do least harm. As we saw several with bite marks on the hindwings, the latter seems more plausible. But if these spots really have protective value, it is curious that they should be more developed in the males than in the females, for whom protection is more important for the survival of the species. However this may be, *M. telmessia ornata*, is clearly a successful species in Rhodes. Heavy spotting on the male hindwings, though without white centres, is characteristic also of *M. jurtina* on the Greek mainland and in Crete; but it appears to be quite absent in *M. cypricola* in Cyprus.

M. telmessia has also been recorded from Karpathos (Rebel 1938), which is half way from Rhodes to Crete; and further north Mr Coutsis has found it on Lesbos, but in a form in which the males have little orange on the forewing upperside and slightly different genitalia. But in other Aegean islands all the records of which I am aware refer only to *M. jurtina*, from Lemnos in the north through the Sporades and Cyclades to Crete in the south; and in Cyprus only *M. cypricola* occurs. In Asia Minor Higgins (1966) and Thomson (1969) give a wide distribution to both *M. telmessia* and *M. jurtina*: the latter seems to occur more in north east Turkey, the former in the south west, but both have been reported from the provinces of Ankara and Adana. There seems, however, to be no reliable evidence that they are anywhere sympatric. They are so different, both structurally and in appearance, that it seems

right to regard them as good species which, perhaps because they fill the same ecological niche, manage somehow to exclude each other from their respective territories. There are some fascinating possibilities for research here.

Hipparchia syriaca ghigi was described by Turati (1929) from Rhodes and other islands of the Dodecanese as a new sub-species of *Satyrus hermione* L., and his description was followed, except for the substitution of the prior name *fagi* Scop. for *hermione*, in the Supplement to Seitz (1929-32). But in their list Turati & Fiori (1930) mentioned only one specimen from Rhodes, a male taken at Aghia Isidoros on 6th May 1928; and Hartig (1940) and Bender did not refer to further specimens or localities. As described above, John Coutsis secured another male beside the road from Lindos to Rhodes on 18th May. His dissection of the mangled wreck shows with certainty, from the form of the Jullien organ, that it belongs to *H. syriaca* Stdgr. The previous lists therefore need to be corrected accordingly. Though the two species are sympatric in the Peloponnese and possibly elsewhere in mainland Greece, *H. fagi* is not known from any of the islands. We had expected that, if we saw a specimen of this group on Rhodes, it would be *H. syriaca*. It was good to have this confirmed, albeit by a specimen which can hardly stand in the cabinet!

Thymelicus actaeon Rott. This species is recorded from Rhodes by Bender and earlier authors without special comment. But the Rhodian specimens in fact differ very considerably from those found on the Greek mainland and further west in Europe. On the uppersides the colour is a much brighter fulvous, though in the males the androconial brand is in most examples surrounded by a suffusion of dark scaling. On the undersides also the colour is brighter, partly owing to the absence of the wedges of grey scales on the hindwings which are usual in the type form. The fine black marginal line is more sharply defined, and the venation also stands out more clearly. The brighter colour and absence of grey scaling is also characteristic of the series I have from Crete and Cyprus, but these specimens are on average rather larger than those from Rhodes.

The difference between the Rhodian form and that of the mainland are such that we thought that it might belong to a different species, possibly to *T. hamza* Oberthur, which Higgins (1970) records from Asia Minor and Cyprus. Dissection has, however, not confirmed this. But it is probable that the island forms should, because of their superficial differences from those of the European mainland, be regarded as one or more good sub-species of *T. actaeon*. Whether the island forms of this and other species also occur on the coast of Asia Minor is uncertain, as there is almost no information about the Rhopalocera of the part of the Turkish coast which faces Rhodes and Cyprus.

RHOPALOCERA NOTED IN RHODES, 22nd-26th May 1971

PAPILIONIDAE. *Iphiclides podalirius* L. Profitis Ilias, several; widespread elsewhere, mostly singly.

PIERIDAE. *Pieris brassicae* L. Widespread but few; large, gen. II. *Pieris rapae* L. Widespread, very few; gen. II. *Pontia daplidice* L. Filerimos, several. *Aporia crataegi fert* Turati & Fiori. Profitis Ilias, Embona, locally common; some elsewhere in the mountains; very large, with heavy black scaling on the venation and undersides, females almost translucent, brownish tinged. *Euchloe ausonia* Hübn. below Petaloudes, one very large female of the summer form. *Colias croceus* Fourc. Filerimos, common, with many f. *helice* females; casually elsewhere. *Gonepteryx farinosa* Zell. Filerimos, Epta Pighes, near Lindos, fresh males, singly.

NYPHALIDAE. *Limenitis reducta* Stdgr. Above Salakos, one seen. *Nymphalis polychloros* L. Profitis Ilias, two, below Ag. Isidoros, one; in fair condition, but apparently hibernated examples. *Vanessa atalanta* L. Profitis Ilias, Filerimos, singly. *V. cardui* L. Singly in many places, worn.

SATYRIDAE. *Hipparchia syriaca ghigii* Turati. Near Afandou, one male, identified by Jullien Organ. *Maniola telmessia ornata* Turati & Fiori. Profitis Ilias and elsewhere; common in many places in the mountains and near the coast. *Pararge roxelana* Cramer. Rhodes City in gardens, Filerimos, below Petaloudes, a few fresh males. *P. megera* L. Profitis Ilias, few, worn.

LYCEAIDAE. *Lycaena phloea* L. Profitis Ilias, two, of the spring form. *Thersamonia thersamon* Esp. Near Paradhissi, in a stream-bed, two worn females of the spring form. *Lampides boeticus* L. Filerimos, below Petaloudes, Kamiros, fresh specimens, singly. *Polyommatus icarus* Rott. near Paradhissi, one very worn, Embona, several fresh males.

HESPERIDAE. *Spialia orbifer* Hübn. Ag. Isidoros, Kamiros, singly, worn. *Thymelicus actaeon* Rott. Filerimos, Kamiros, locally common, and a few elsewhere: probably an undescribed sub-species. *Carcharodus alceae* Esp., near Paradhissi, one worn.

23 species.

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